

An Ecological Model Approach to Childhood Obesity

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Objectives

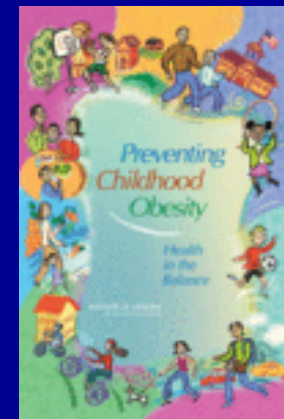
- To review an ecological approach to health promotion/disease prevention as it relates to childhood obesity
- To define characteristics of the intervention approaches to address childhood obesity
- To present aspects of successful programs
- To present examples of new intervention models

Objectives

- To discuss challenges with respect to research design and program evaluation
- To examine the role of the federal government and land-grant universities as it relates to interventions for childhood obesity



IOM Report: Preventing Childhood Obesity: Health in Balance



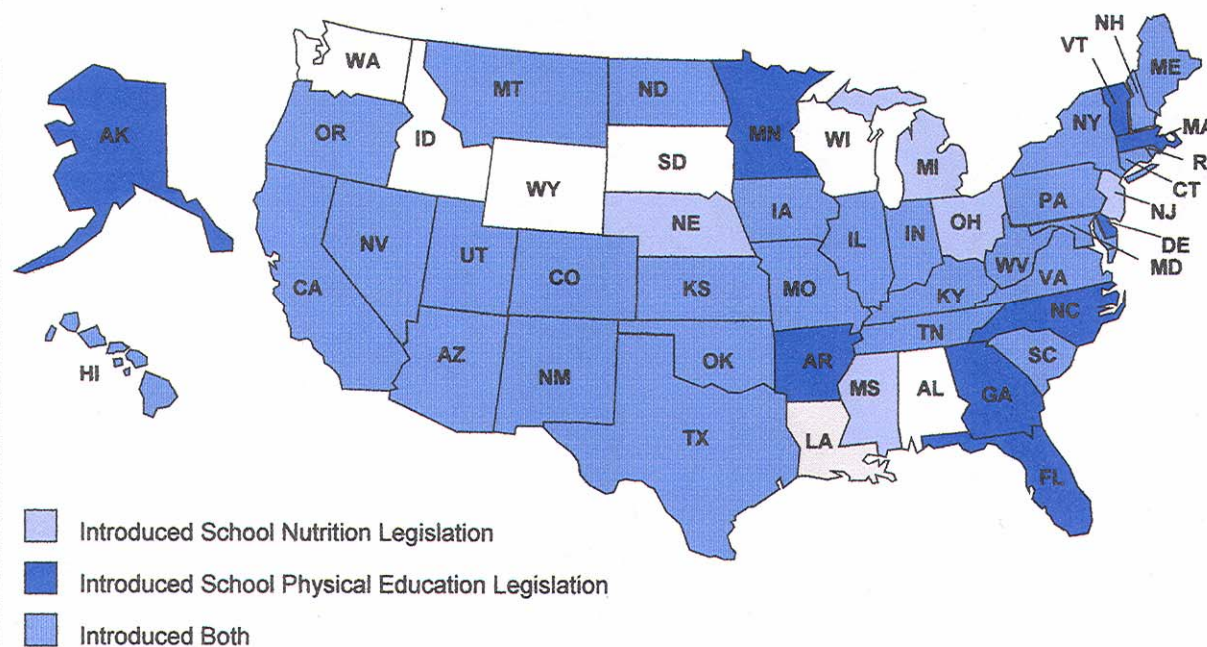
"The dangers are not in working with models but in working with too few, and those too much alike, and above all in belittling any effort to work with anything else."

Abraham Kaplan

School-Based Demonstration Projects

Environmental and Policy Interventions

2005 School Nutrition and Physical Education Legislation



Source: NETSCAN's Health Policy Tracking Service, April 2005

Successful Programs

- Take time
- Incorporate a generational approach
- Are offered in a variety of community settings
- Managed by caring staff
- Ensure consistent messages
- Incorporate **FUN!!!**

Promising Approaches

- Computer games
- Theater
- Impact whole communities

Research Design, Program Evaluation

- Mediators
- Moderators
- Other factors

Specific Factors

- The influence of family dynamics
- Parenting styles
- Parent values for health
- Parent-child communication
- School organizational characteristics
- The relationship of teacher role modeling

Specific Factors

- Environmental determinants
- Social-cognitive predictors of dietary intake and physical activity
- Food availability
- Proximity of safe places to play

Program Evaluation

Formative Evaluation

- Community involvement
- Cultural relevance
- Grounding in the real-life experiences, context, and economic realities of children and parents
- Resiliency-based approach

Formative Evaluation

- Identify specific behaviors
- Inform the selection and design of interventions
- Identify delivery channels and settings
- Develop data collection instruments
- Plan a program that is feasible

Process Evaluation

- Recruitment and maintenance of participants
- The context within which the program functions
- The resources available to the program and the participants
- Implementation of the programs

Process Evaluation

- Receipt of materials by the target population
- Barriers to implementing the program
- The initial use of the program activities
- The continued use of the program

Questions

- Can the program be generalized to other settings and other populations?
- If not, then what modifications need to be made?

Measurement

- Diet and physical activity measurement is plagued with problems
- We can develop better measures
- We need to consider audiences beyond our academic peers

"University scholars are drawn to highly structured programs which reflect their scholarly interest rather than the less structured community participation approach which although it offers less control, can offer longer term continuity and sustainability."

Byron Hirsch

Federal Government and the Land-Grant Universities

Agricultural Research Service (ARS)

- Partnering with business other federal agencies, state and local governments and universities

Cooperative State Research Education and Extension Service (CSREES)

- Its unique mission is to advance knowledge for agriculture, the environment, human health and well being and communities by supporting research, education and extension

The unique opportunity for USDA in this area is one focused on obesity prevention in children by creating with communities and families supporting environments that foster healthy choices for individuals and families.

Research Models

- University placed
- University based
- Community collaborative

Opportunities for USDA

- Create networks of researchers and communities
- Networks for methodological studies
- Fostering longer term multi-site studies that address the social/ecological model

“Outreach”

- Integrate health into community development activities
- Developing approaches that will work in rural communities

We can impact childhood obesity using an ecological approach, learning as we go, documenting our success, teaching other communities and over time we can make a difference.